Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) ~~Use of agents which reduce or inhibit the expression and/or activity of protein kinase C-α (PKC-α) for the~~ A method of treatment and/or prevention of vascular diseases, cardiovascular diseases, renal diseases involving proteinuria, diabetic late effects and/or cardiovascular complications in patients with diabetes mellitus, cardiovascular complications in patients with hypertension, and/or cardiovascular complications in patients with hypercholesterolemia, comprising administering at least one agent which reduces or inhibits the expression and/or activity of protein kinase C-α (PKC-α).

2. (currently amended) ~~The use according to claim 1~~ The method of claim 1, wherein said vascular diseases and cardiovascular diseases are selected from the group consisting of peripheral occlusive disease, coronary heart disease, myocardial infarction and stroke.

3. (currently amended) ~~The use according to claim 1~~ The method of claim 1, wherein said cardiovascular complications are selected from the group consisting of peripheral occlusive disease, coronary heart disease, myocardial infarction ~~and/or~~ and stroke.

4. (currently amended) ~~The use according to claim 1~~ The method of claim 1, wherein said diabetic late effects are selected from the group consisting of diabetic retinopathy, diabetic neuropathy ~~and/or~~ and diabetic nephropathy.

5. (currently amended) ~~The use according to claim 1~~ The method of claim 1, wherein said renal diseases involving proteinuria are parenchymal kidney diseases.

6. (currently amended) ~~The use according to claim 5~~ The method of claim 5, wherein said proteinuria is selected from the group consisting of glomerular proteinuria, tubular proteinuria ~~or~~ and mixed glomerulo-tubular proteinuria.

7. (currently amended) ~~The use according to claim 5 or 6~~ The method of claim 5, wherein said renal diseases are selected from the group consisting of minimal-change nephropathy, other glomerulopathies, kidney amyloidosis, hereditary tubulopathy, renal-tubular azidosis, interstitial nephritis induced by bacteria or medicaments, acute renal failure, Bence-Jones nephropathy ~~or~~ and kidney transplantation.

8. (cancelled)

9. (currently amended) ~~The use according to claim 8~~ The method of claim 1, wherein said ~~agents are~~ agent is selected from the group consisting of at least one nucleic ~~acids~~ acid which ~~reduce or inhibit~~ reduces or inhibits the expression of the protein kinase C-α gene, a ~~vectors~~ vector containing said nucleic acid, a host ~~cells~~ cell containing said ~~vectors~~ vector, a ~~substances~~ substance which ~~inhibit or reduce~~ reduces or inhibits the expression of protein kinase C-α, a ~~substances~~ substance which ~~inhibit~~ inhibits the translocation of protein kinase C-α, an ~~antagonists~~ antagonist of protein kinase C-α activity, and an ~~inhibitors~~ inhibitor of protein kinase C-α activity.

10. (currently amended) ~~The use according to claim 9~~ The method of claim 9, wherein said nucleic acid can inhibit the expression of the gene of human protein kinase C-α in a host cell in anti-sense orientation to a promoter.

11. (currently amended) ~~The use according to claim 9 or 10~~ The method of claim 9, wherein said nucleic acid is selected from the group consisting of

a) a nucleic acid coding for human protein kinase C-α, or a fragment thereof;

b) a nucleic acid which is complementary to the nucleic acid ~~according to~~ of group a), or a fragment thereof;

c) a nucleic acid which is obtainable by substitution, addition, inversion and/or deletion of one or more bases of a nucleic acid ~~according to~~ of group a) or b), or a fragment thereof; and

d) a nucleic acid which has more than 80% homology with a nucleic acid ~~according to~~ any of group a) through c), or a fragment thereof.

12. (currently amended) ~~The use according to claim 11~~ The method of claim 11, wherein said fragment of the nucleic acid of any of group a) through d) comprises at least 10 nucleotides~~, preferably at least 50 nucleotides, more preferably at least 200 nucleotides~~.

13. (currently amended) ~~The use according to any of claims 9 to 12~~ The method of claim 9, wherein said nucleic acid is a DNA or a RNA.

14. (currently amended) ~~The use according to any of claims 9 to 13~~ The method of claim 9, wherein said nucleic acid or fragment thereof is inserted in a vector under the control of at least one expression regulating element in antisense orientation thereto.

15. (currently amended) ~~The use according to claim 14~~ The method of claim 14, wherein said vector is selected from the group consisting of a plasmid, a cosmid, a bacteriophage or a virus.

16. (currently amended) ~~The use according to claim 14 or 15~~ The method of claim 14, wherein said expression regulating element is selected from the group consisting of a promoter, a ribosome binding site, a signal sequence or a 3' transcription terminator.

17. (currently amended) ~~The use according to any of claims 14 to 16~~ The method of claim 14, wherein said vector is contained in a host cell.

18. (currently amended) ~~The use according to~~ The method of claim 17, wherein said host cell is a ~~mammal~~ mammalian cell~~, especially a human cell~~.

19. (currently amended) ~~The use according to claim 9~~ The method of claim 9, wherein said substance which inhibits or reduces the expression of protein kinase C-α is an activator of protein kinase C-α.

20. (currently amended) ~~The use according to claim 19~~ The method of claim 19, wherein said activator is a phorbol compound.

21. (currently amended) ~~The use according to~~ The method of claim 20, wherein said phorbol compound is selected from a group consisting of 12-O-tetradecanoylphorbol-13-acetate (TPA) and phorbol-12,13-dibutyrate (PDBu).

22. (currently amended) ~~The use according to~~ The method of claim 9, wherein said inhibitor of protein kinase C-α activity is an antibody which reacts with protein kinase C-α.

23. (currently amended) ~~The use according to~~ The method of claim 22, wherein said antibody is selected from a group consisting of a monoclonal antibody and a ~~or~~ polyclonal antibody.

24. (currently amended) ~~The use according to claim 22 or 23~~ The method of claim 22, wherein said antibody is a humanized antibody.

25. (currently amended) ~~The use according to~~ The method of claim 9, wherein said inhibitor of protein kinase C-α activity changes the phosphorylation state of protein kinase C-α.

26. (currently amended) ~~The use according to~~ The method of claim 25, wherein said inhibitor is tocopherol.

27. (currently amended) ~~The use according to~~ The method of claim 9, wherein said antagonist is selected from a group consisting of a derivative ~~or~~ and an analogue of protein kinase C-α.

28. (currently amended) ~~The use according to any of claims 1 to 7~~ The method of claim 1, wherein said agent which reduces or inhibits the expression and/or activity of protein kinase C-α is an agent which ~~at the same time~~ reduces or inhibits the expression and/or activity of protein kinase C-β.

29. (currently amended) ~~The use according to claim 28~~ The method of claim 28, wherein said agent is cyclosporine A.

30. (currently amended) ~~The use according to any of claims 1 to 27~~ The method of claim 1, wherein said agent which specifically reduces or inhibits the expression and/or activity of protein kinase C-α is ~~employed~~ administered in

combination with an agent which ~~specifically~~ reduces or inhibits the expression and/or activity of protein kinase C-β.

31. (currently amended) ~~The use according to claim 30~~ The method of claim 30, wherein said agent which reduces or inhibits the expression and/or activity of protein kinase C-β is selected from the group consisting of at least one nucleic ~~acids~~ acid which ~~reduce or inhibit~~ reduces or inhibits the expression of the protein kinase C-β gene, a ~~vectors~~ vector containing said nucleic acid, a host ~~cells~~ cell containing said ~~vectors~~ vector, a ~~substances~~ substance which ~~inhibit or reduce~~ reduces or inhibits the expression of protein kinase C-β, a ~~substances~~ substance which ~~inhibit~~ inhibits the translocation of protein kinase C-β, an ~~antagonists~~ antagonist of protein kinase C-β activity, and an ~~inhibitors~~ inhibitor of protein kinase C-β activity.

32. (currently amended) ~~The use according to claim 31~~ The method of claim 31, wherein said nucleic acid is selected from the group consisting of

a) a nucleic acid coding for human protein kinase C-β, or a fragment thereof;

b) a nucleic acid which is complementary to the nucleic acid ~~according to~~ of group a), or a fragment thereof;

c) a nucleic acid which is obtainable by substitution, addition, inversion and/or deletion of one or more bases of a nucleic acid ~~according to~~ of group a) or b), or a fragment thereof; and

d) a nucleic acid which has more than 80% homology with a nucleic acid ~~according to~~ of any of group a) through c), or a fragment thereof.

33. (currently amended) ~~The use according to~~ The method of claim 32, wherein said fragment of the nucleic acid of any of group a) through d) comprises at least

10 nucleotides~~, preferably at least 50 nucleotides, more preferably at least 200 nucleotides~~.

34. (currently amended) ~~The use according to any of claims 31 to 33~~ The method of claim 31, wherein said nucleic acid is a DNA or a RNA.

35. (currently amended) ~~The use according to any of claims 31 to 34~~ The method of claim 31, wherein said nucleic acid or fragment thereof is inserted in a vector under the control of at least one expression regulating element in antisense orientation thereto.

36. (currently amended) ~~The use according to~~ The method of claim 35, wherein said vector is a plasmid, a cosmid, a bacteriophage or a virus.

37. (currently amended) ~~The use according to claim 35 or 36~~ The method of claim 35, wherein said expression regulating element is a promoter, a ribosome binding site, a signal sequence or a 3' transcription terminator.

38. (currently amended) ~~The use according to any of claims 35 to 37~~ The method of claim 35, wherein said vector is contained in a host cell.

39. (currently amended) ~~The use according to~~ The method of claim 38, wherein said host cell is a ~~mammal~~ mammalian cell~~, especially a human cell~~.

40. (currently amended) ~~The use according to~~ The method of claim 31, wherein said inhibitor of protein kinase C-β activity is an antibody which reacts with protein kinase C-β.

41. (currently amended) ~~The use according to~~ The method of claim 40, wherein said antibody is a monoclonal or a polyclonal antibody.

42. (currently amended) ~~The use according to claim 40 or 41~~ The method of claim 40, wherein said antibody is a humanized antibody.

43. (currently amended) ~~The use according to~~ The method of claim 31, wherein said inhibitor of protein kinase C-β activity changes the phosphorylation state of protein kinase C-β.

44. (currently amended) ~~The use according to~~ The method of claim 31, wherein said antagonist is a derivative of protein kinase C-β or an analogue of protein kinase C-β.

45. (currently amended) ~~Use of agents which reduce or inhibit the expression and/or activity of protein kinase C-α (PKC-α) for the~~ A method of preparation of a pharmaceutical composition for the treatment and/or prevention of coronary heart disease, myocardial infarction, peripheral occlusive disease, stroke, renal diseases involving proteinuria, diabetic late effects and/or cardiovascular complications in patients with diabetes mellitus, cardiovascular complications in patients with hypertension, and cardiovascular complications in patients with hypercholesterolemia, comprising the use of at least one agent which reduces or inhibits the expression and/or activity of protein kinase C -α (PKC-α).

46. (currently amended) ~~The use according to~~ The method of claim 45, wherein said cardiovascular complications are coronary heart disease, myocardial infarction, peripheral occlusive disease or stroke.

47. (currently amended) ~~The use according to~~ The method of claim 45, wherein said diabetic late effects are diabetic retinopathy, diabetic neuropathy and diabetic nephropathy.

48. (currently amended) ~~The use according to claim 45 to 47~~ The method of claim 45, wherein said ~~agents are~~ agent is selected from the group consisting of a nucleic ~~acids~~ acid which ~~reduce or inhibit~~ reduces or inhibits the expression of the protein kinase C-α gene, a ~~vectors~~ vector containing said nucleic acid, a host ~~cells~~ cell containing said ~~vectors~~ vector, a ~~substances~~ substance which ~~inhibit or reduce~~ reduces or inhibits the expression of protein kinase C-α, a ~~substances~~ substance which ~~inhibit~~ inhibits the translocation of protein kinase C-α, an ~~antagonists~~ antagonist of protein kinase C-α activity, and an ~~inhibitors~~ inhibitor of protein kinase C-α activity.

49. (currently amended) ~~The use according to~~ The method of claim 48, wherein said ~~agents are~~ agent is selected from the group consisting of an antisense ~~oligonucleotides~~ oligonucleotide of ~~the~~ a gene coding for a protein selected from the group consisting of protein kinase C-α, tocopherol, phorbol compounds, derivatives of protein kinase C-α, ~~or~~ and analogues of protein kinase C-α.

50. (previously presented) A pharmaceutical composition for the treatment and/or prevention of coronary heart disease, myocardial infarction, peripheral occlusive disease, stroke, renal diseases involving proteinuria, diabetic late effects and/or cardiovascular complications in patients with diabetes mellitus, cardiovascular complications in patients with hypertension, and cardiovascular complications in patients with hypercholesterolemia, comprising at least one agent which reduces or inhibits the expression and/or activity of protein kinase C-α (PKC-α) as an active ingredient.

51. (currently amended) The pharmaceutical composition ~~according to~~ of claim 50, wherein said ~~agents are~~ agent is selected from the group consisting of ~~nucleic~~ ~~acids~~ a nucleic acid which ~~reduce or inhibit~~ reduces or inhibits the expression of the

protein kinase C-α gene, a ~~vectors~~ vector containing said nucleic acid, a host ~~cells~~ cell containing said ~~vectors~~ vector, a ~~substances~~ substance which ~~inhibit or reduce~~ reduces or inhibits the expression of protein kinase C-α, a ~~substances~~ substance which ~~inhibit~~ inhibits the translocation of protein kinase C-α, an ~~antagonists~~ antagonist of protein kinase C-α activity, and an ~~inhibitors~~ inhibitor of protein kinase C-α activity.

52. (currently amended) The pharmaceutical composition ~~according to~~ of claim 51, wherein said ~~agents are~~ agent is selected from the group consisting of an antisense ~~oligonucleotides~~ oligonucleotide of the gene coding for protein kinase C-α, tocopherol, a phorbol ~~compounds~~ compound, a ~~derivatives~~ derivative of protein kinase C-α, ~~or~~ and an ~~analogues~~ analogue of protein kinase C-α.

53. (currently amended) The pharmaceutical composition ~~according to any~~ of claims 50 ~~to 52~~, comprising at least one ~~further~~ additional active ingredient.

54. (currently amended) The pharmaceutical composition ~~according to~~ of claim 53, wherein said ~~further~~ additional active ingredient is an agent which ~~specifically~~ reduces or inhibits the expression and/or activity of protein kinase C-β.

55. (currently amended) The pharmaceutical composition ~~according to~~ of claim 54, wherein said agent which reduces or inhibits the expression and/or activity of protein kinase C-β is selected from the group consisting of a nucleic ~~acids~~ acid which ~~reduce or inhibit~~ reduces or inhibits the expression of the protein kinase C-β gene, a ~~vectors~~ vector containing said nucleic acid, a host ~~cells~~ cell containing said ~~vectors~~ vector, a ~~substances~~ substance which ~~inhibit or reduce~~ inhibits or reduces the expression of protein kinase C-β, a ~~substances~~ substance which ~~inhibit~~ inhibits the translocation of

protein kinase C-β, an ~~antagonists~~ antagonist of protein kinase C-β activity, and an ~~inhibitors~~ inhibitor of protein kinase C-β activity.

56. (new) The method of claim 11, wherein said fragment of the nucleic acid of any of group a) through d) comprises at least 50 nucleotides.

57. (new) The method of claim 11, wherein said fragment of the nucleic acid of any of group a) through d) comprises at least 200 nucleotides.

58. (new) The method of claim 18, wherein said host cell is a human cell.

59. (new) The use according to claim 32, wherein said fragment of the nucleic acid of any of group a) through d) comprises at least 50 nucleotides.

60. (new) The use according to claim 32, wherein said fragment of the nucleic acid of any of group a) through d) comprises at least 200 nucleotides.

61. (new) The method of claim 39, wherein said host cell is a human cell.